EFFECT OF CORPORATE SOCIAL RESPONSIBILITY ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

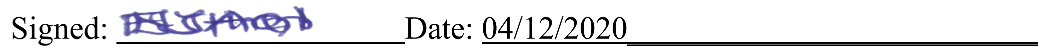
NJAGI ESTHER WAWIRA

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

2020

DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any institution or university other than the University of Nairobi for examination.

Signed:  Date: 04/12/2020

NJAGI ESTHER WAWIRA

D63/7900/2017

This research project has been submitted for examination with my approval as the University Supervisor.

Signed: Date: December 04, 2020

DR. HERRICK ONDIGO

Lecturer, Department of Finance and Accounting

School of Business, University of Nairobi

ACKNOWLEDGEMENT

First and Foremost, praises and thanks to the God almighty for his shower of blessings throughout my research work. I am extremely grateful to my Supervisor, Dr Herrick Ondigo for his patience, enthusiasm and immense knowledge. His guidance and advice helped me during the research period.

To my parents, siblings and friends thank you for your love, care, prayers and motivation during my entire Msc course, your tremendous support gave me the strength and confidence to believe in a better future.

DEDICATION

I dedicate this work to my Parents Mr and Mrs. Njagi and my siblings Maurice, James, Carol and Bernard. I thank you very much for the love, Patience and sacrifices that you have made for me.

TABLE OF CONTENTS

DECLARATION .... **ii**

ACKNOWLEDGEMENT .... **iii**

DEDICATION .... **iv**

LIST OF TABLES .... **viii**

LIST OF FIGURES .... **ix**

LIST OF ABBREVIATIONS .... **x**

ABSTRACT .... **xi**

CHAPTER ONE: INTRODUCTION **1**

1.1 Background of the Study 1

1.1.1 Corporate Social Responsibility 2

1.1.2 Financial Performance 3

1.1.3 Corporate Social Responsibility and Financial Performance 4

1.1.4 Commercial Banks in Kenya 5

1.2 Research Problem 6

1.3 Objective of the Study 9

1.4 Value of the Study 9

CHAPTER TWO: LITERATURE REVIEW **10**

2.1 Introduction 10

2.2 Theoretical Framework 10

2.2.1 Stakeholder Theory 10

2.2.2 Triple Bottom Line Theory 11

2.2.3 Agency Relationship Theory 12

2.3 Determinants of Financial Performance 13

2.3.1 Corporate Social Responsibility 13

2.3.2 Bank Size 14

2.3.3 Bank Liquidity 15

2.3.4 Capital Adequacy 16
2.4 Empirical Review 16
2.4.1 Global Studies 16
2.4.2 Local Studies 18
2.5 Conceptual Framework 20
2.6 Summary of the Literature Review 21
CHAPTER THREE: RESEARCH METHODOLOGY 23
3.1 Introduction 23
3.2 Research Design 23
3.3 Population 23
3.4 Data Collection 23
3.5 Diagnostic Tests 24
3.6 Data Analysis 24
3.6.1 Analytical Model 24
3.6.2 Tests of Significance 25
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION 25
4.1 Introduction 27
4.2 Descriptive Analysis 27
4.3 Trend Analysis 28
4.3.1 Corporate Social Responsibility 28
4.3.2 Capital Adequacy 28
4.3.3 Bank Size 29
4.3.4 Liquidity 30
4.3.5 Financial Performance 31
4.4 Diagnostic Tests 31
4.4.1 Stationarity Test 32
4.4.2 Normality Test 32

4.4.3 Autocorrelation Test....33
4.4.4 Multicollinearity Test....33
4.5 Correlation Analysis....34
4.6 Regression Analysis....35
4.7 Discussion of Research Findings....38
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS....41
5.1 Introduction....41
5.2 Summary....41
5.3 Conclusion....43
5.4 Recommendations for Policy and Practice....44
5.5 Limitations of the Study....44
5.6 Suggestions for Further Research....45
REFERENCES....48
APPENDICES....49
Appendix I: Commercial Banks in Kenya....53
Appendix II: Research Data....55

LIST OF TABLES

Table 4.1: Descriptive Statistics 27
Table 4.2: Stationarity Test...32
Table 4.3: Normality Test...33
Table 4.4: Autocorrelation Test 33
Table 4.5: Multicollinearity Test 34
Table 4.6: Correlation Analysis..35
Table 4.7: Model Summary 35
Table 4.8: ANOVA..36
Table 4.9: Model Coefficients 37

LIST OF FIGURES

Figure 4.1: Corporate Social Responsibility....................28
Figure 4.2: Capital Adequacy....................29
Figure 4.3: Bank Size....................30
Figure 4.4: Liquidity....................31
Figure 4.5: Financial Performance....................31

LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
CBK	Central Bank of Kenya
CEO	Chief Executive Officer
CSR	Corporate Social Responsibility
FP	Financial Performance
GDP	Gross Domestic Product
GMM	Generalized Method of Movements
KCB	Kenya Commercial Bank
KDIC	Kenya Deposit Insurance Corporation
NIM	Net Interest Margin
NPL	Non-Performing Loans
NSE	Nairobi Securities Exchange
ROA	Return on Assets
SPSS	Statistical Package for Social Sciences
TBL	Triple Bottom Line
VIF	Variance Inflation Factors

ABSTRACT

Central in the field of finance is financial performance. The need to explain how two firms operating within the same environment perform differently is a concern and several research works in finance have been devoted towards understanding this mystery. This led to studies which focus on various internal factors as well as external issues thought to be the cause of differing financial performance. Companies are continuously engaging in Corporate Social Responsibility activities, however, the society does not seem to be convinced that the organizations are doing it for the good of the society. The society almost always views an organization engaging in CSR as a public relations move rather than an activity carried out with the society's best interests in mind. This study sought to determine how CSR influences financial performance of banks in Kenya. 42 commercial banks in operation in Kenya as at 31st December 2019 were the population of the study. Data from 37 banks was availed for the study which was 88.10% response rate. The predictor variables were CSR, capital adequacy, bank size and liquidity. Financial performance was given by ROA and it was the dependent variable. Secondary data was acquired for 5 years (January 2015 to December 2019) on an annual basis. Research design was descriptive cross-sectional design whereas association between variables was determined by multiple linear regression model. SPSS version 23 was used in data analysis. An R-square value of 0.293 was obtained and this can be translated to mean 29.3% of the variations in financial performance of banks in Kenya can be related to the four chosen predictor variables whereas 70.7% in the changes of financial performance of banks was linked to other variables that did not form part of this study. From the study it was further revealed that the predictor variables moderately correlated with financial performance (R=0.541). ANOVA results show that the F statistic was significant at 5% level with a p=0.000. Henceforth, the model was appropriate in providing an explanation of the relationship between the variables. Additionally, results demonstrated that capital adequacy, bank size and liquidity were positively and statistically substantial values in this study as the p values were less than 0.05 while CSR had a positive but not statistically significant influence on financial performance as shown by a p value greater than 0.05. The findings are consistent with previous studies which found that CSR contributes to other aspects of the firm and not necessarily financial performance. The recommendation is that measures should be set up to increase capital adequacy, bank size and liquidity as these three has a significant influence on financial performance. The study recommends the need for future studies to focus on the effect of CSR on other aspects such as firm value, sustainability and growth of firms or economy as a whole.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The changing business and societal environment promotes the adoption of business and company processes that place emphasis on the social and economic importance placed on the growth of the communities within the operational area of the businesses. Engagement of businesses in community processes and activities remain critical in ensuring that the business develops an informed understanding of the social and economic standing of the society, which remains critical in facilitating the adoption of precautions tailored towards enhancing continued business growth and development (Branzei & Vertinsky, 2017). Finn (2017) notes that embracing Corporate Social responsibility (CSR) derives benefits for the organizations itself, the community and the environment. Through CSR Organizations are able to get benefits in terms of increased sales, improve brand image, customer loyalty, better financial performance, reduced employee turnover and a diversified workforce (Ramirez & Selsky, 2015).

Agency theory, the stakeholder theory and triple bottom line theory underline this study. The stakeholder theory is the anchor theory and it maintains that the company remains tasked with the duty of adopting activities and operations that meet all the stakeholder interests (Orlitzky, 2003). The agency theory by Ross (1973) posits that the main objective of an agent is to put to maximization the returns of all stakeholders. This is not usually the case and thus results to the principle's problem. Triple bottom line theory assumes that an organization is also a part of a moral community, and that hands it social responsibility. This theory is based of sustainability and that firms should at any time try to weigh out their actions on social, economic and environmental sustainability (Matteson & Metivier, 2016). The Triple Bottom Line (TBL) theory

advanced by Elkington (2004) holds the assumption that a firm is a moral community member and as such it is expected to be socially responsible.

The study focused on Kenyan commercial banks, and this choice arises from the fact that the commercial banking sector is one of the sectors that has invested heavily on CSR. Some examples of investment in CSR by commercial banks in Kenya include Equity bank Wings to fly programme and KCB bank 2jiajiri programme. It is important to investigate the motives together with the development of policies geared towards promoting the level of company accountability through the adoption of CSR reporting. It is on this argument that the study intended to identify the effect of corporate social responsibility on the financial performance of Kenyan banks.

1.1.1 Corporate Social Responsibility

This is the commitment of a corporation to promote economic development that is sustainable to members of the society in order to improve people's quality of life (Dahlsrud, 2008). Corporate social responsibility can be best explained as where organizations voluntarily integrate environmental and social concerns into their business operations and seek to work towards alleviating them. Corporate social responsibility was founded on the premise that corporations are in relation with other interests such as, social cultural systems, economic and environmental systems since business activities sometimes affect such systems in the society (Dobers, 2009).

The development of an understanding of CSR remains instrumental in promoting the level of corporate engagement in community activities geared towards facilitating continued community growth and development. In some cases, companies adopt CSR activities as a public relations event geared towards promoting the development of the company's image in the market among customers. In the past decade, banking

companies have sought to continually engage in CSR activities. The analysis of the activities remains instrumental as it promotes the identification of the motives together with the development of policies geared towards promoting the level of company accountability through the adoption of CSR reporting (Branzei & Vertinsky, 2002).

To date, there is no formula for measuring corporate social responsibility. Different scholars have used different methodology, Maignan and Ferrell (2000) used three key methods to measure it which include expert assessment, single or multiple reputation indices and management surveys. Turker (2009) considered the following approaches as realistic ways for measuring CSR. These approaches include databases, reputation indices, content analysis of publications and measurement frameworks at individual and organizational levels. Kang, Lee and Huh (2010) used the ratio of CSR expenditure to total firm expenditure as measures of CSR and this is the measure the current study adopted.

1.1.2 Financial Performance

Almajali, Alamro and Al-Soub (2012) define Financial Performance (FP) as a firm's ability to achieve the range of set financial goals such as profitability. FP is a degree of the extent to which a firm's financial benchmarks has been achieved or surpassed. It shows the extent at which financial objectives are being accomplished. As outlined by Baba and Nasieku (2016), FP show how a company utilizes assets in the generation of revenues and thus it gives direction to the stakeholder in their decision making. Nzuve (2016) asserts that the health of the bank industry largely depends on their FP which is used to indicate the strengths and weaknesses of individual banks. Moreover, the government and regulatory agencies are interested on how banks perform for the regulation purposes.

The focus of FP is majorly on items that directly alter the statements of finance or the firm's reports (Omondi & Muturi, 2013). The firm's performance is the main external parties' tool of appraisal (Bonn, 2000). Hence this explains why firm's performance is used as the gauge. The attainment level of the objectives of the firm describes its performance. The results obtained from achieving objectives of a firm both internal and external, is the FP (Lin, 2008). Several names are given to performance, including growth, competitiveness and survival (Nyamita, 2014).

Measurement of FP can be done using a number of ratios, for instance, Net Interest Margin (NIM) and Return on Assets (ROA). This is a measure that indicates the capability of the bank to make use of the available assets to make profits (Milinović, 2014). ROA is calculated by dividing operating profit by total asset ratio which is used for calculating earnings from all company's financial resources. On the other hand, NIM measures the spread of the paid out interest to the lenders of banks, for instance, liability accounts, and the interest income that the banks generates in relation to the value of their assets. Dividing the net interest income by total earnings assets expresses the NIM variable (Crook, 2008). Market based measures such as earnings per share, market to book value of equity, dividend yield, stock return and price earnings ratio have been used before as measures of financial performance (Almajali et al., 2012).

1.1.3 Corporate Social Responsibility and Financial Performance

Arguments have been made concerning the relationship between CSR and financial performance. One of them states a trade-off between the social costs and an entity's financial performance. The scholars' critique that those firms that incur the social costs are disadvantaged in comparison to those which are not socially responsible (Aupperle, Ullmann, Carroll, & Hatfield, 1985). Another contrasting argument is that the actual

costs that a firm incurs in Corporate Social Responsibility are minimal and the firm eventually improves their employee morale and production which will eventually improve the financial performance (Soloman & Hansen, 1985).

According to Kanwal, Khanam, Nasreen and Hameed (2013), it is important to understand CSR since it impacts the firm's financial performance. Management of firms consider that CSR is capable of growing profits. Additionally, they believe that CSR has the ability to uphold respect of the firms in the market. As a result, CSR would then result to better sales for the firm, attraction of competent workforce and eventually increase in financial profitability of their organizations (Robins, 2015).

When Firms spends on activities of CSR, it helps on the sustainability of the firm in the long run and also improvement of the FP. A study explored the relationship between the performance of banks and CSR. The interest of the study was 318 firms in China that had restructured between the period 1997 and 2003. The findings of the study revealed that firms that restructured encountered significant decrease in profits within the immediate 3-year period (Zu, 2009). The study placed emphasis on the integration of an understanding of CSR, which is considered imperative in developing informed knowledge on the need and importance of adopting CSR and overall impact on promoting the level of business growth and development.

1.1.4 Commercial Banks in Kenya

The CBK defines a bank as a business which carries out, or intends to conduct banking activities in Kenya. Commercial banking business involves the acceptance of deposits, issuing credit, money remittances and other financial services. This sector plays a key role in financial services and places much emphasis on the mobilization of savings and provision of credit. The Bank Supervision annual report (2018) states that, the banking

industry consists of the CBK as the legislative authority. The sector has 1 mortgage finance, 42 commercial banks and 13 microfinance banks. Among the 42 banks, 30 have local ownership while 12 have foreign ownership. 11 of the 42 are listed at the NSE.

Tier 1 banks in Kenya are made up of six banks and the jointly control 49.9 % of the market. They are namely; Kenya Commercial Bank, Standard Chartered bank, Commercial bank of Africa, Co-operative Bank of Kenya, Barclays Bank and Equity Bank. Tier 2 banks control 41.7% and are 16 in number while tier 3 banks control 8.4 % and are 20 in number (CBK, 2018). The fact that tier 1 banks control nearly half the market, the expectation is that they report higher financial performance and also spend more in absolute terms on CSR activities.

Commercial banks have embraced CSR as a concept of strategic importance (Okoth, 2012). For a long time, CSR had been considered to be a public relations undertaking with no positive impact on profitability. However, commercial banks have changed this concept. Initially, CSR was under the marketing department. Today, most of the commercial banks have created a distinct department for CSR. The department, just like finance and marketing departments, is ranked highly during corporate planning. Companies devote sufficient funds for CSR activities and they create policies with the public at heart (CBK, 2018).

1.2 Research Problem

Companies are continuously engaging in Corporate Social Responsibility activities, however, the society does not seem to be convinced that the organizations are doing it for the good of the society. The society almost always views an organization engaging in CSR as a public relations move rather than an activity carried out with the society's

best interests in mind (Palmer, 2012). Porter (2006) supported this notion and concluded that businesses are often pit against the society even though the society and businesses are interdependent. CSR, as a concept, is marred with misunderstandings which makes its effectiveness challenging. One great misunderstanding is that CSR is seen as a public relations move, instead of a process that creates value and one whose sole purpose is to enable companies be sustainable. The other misunderstanding is that companies have pretended to pursue CSR, while in reality have only done this as a means for carrying out profit maximizing operations.

In recent years (2010-2019), there has been an increase in the carrying out of CSR activities by Kenyan banks. The drastic growth in expenditures by banks to carry out the CSR activities suggests that people are finding a benefit in carrying Corporate Social Responsibility activities (Palmer, 2012). At the same time, financial performance of commercials banks has exhibited significant differences. While some banks have reported high returns, others have had issues to the extent of liquidation. Dubai bank was placed in liquidation while Imperial bank and Chase bank were placed under receivership in 2016. This depicted clearly that, some Kenya's banks continue to experience problem in financial performance. However, banks like; KCB, Equity bank and Co-operative Bank have registered positive performance in the last 10 years (CBK, annual report, 2018). To create more understanding of why some banks show positive performance while others show a negative, the drive of this study is to determine whether CSR influence financial performance of Kenyan banks.

There are several studies conducted on CSR and firms FP in developed economies. Hirigoyen and Rehm (2018) explored the association between different components of CSR (human rights in work place, human resource, and respect for environment,

societal commitment, and government and market behavior) and financial performance and concluded that CSR does not have any impact on financial performance. Deng, Kang and Low (2018) evaluate how CSR impacts on profitability of merged firms in the US. The finding was that firms with high CSR reported higher profits compared to firms with low CSR. The study was conducted in a different context and therefore the findings cannot be generalized to the local context.

Locally, Mosoti (2016) conducted a study to establish the effects of corporate social responsibility on financial performance in the telecom industry. It was concluded that there is a substantial relation between the CSR and financial performance (ROA and ROE) for all aggregated telecommunication companies in Kenya. Moraa (2016) focused on the relationship between CSR and FP of commercial banks in Kenya and concluded that there exists a positive relationship. Ng'ang'a (2018) focused on the effect that corporate social responsibility has on performance of Kenyan banks. The study demonstrates that all banks in Kenya stand to benefit from being socially responsible.

From the empirical review, there exist conceptual, contextual and methodological gaps. Conceptually, the available global studies on CSR and FP are inconsistent. Hirigoyen and Rehm (2018) found that CSR has no significant influence on FP while Deng et al. (2018) found a positive effect. The available local studies that focuses on the relationship between the two variables (Mosoti, 2016; Moraa, 2016 & Ng'ang'a, 2018) have used different measures of CSR and this might explain the differences in findings. Mosoti (2016) and Moraa (2016) used staff costs while Ng'ang'a (2018) used the number of CSR activities conducted in a year. The current study applied the ratio of CSR expenditure to total expenditure as applied before by Kang et al. (2010).

Methodologically, most of the previous studies have used primary data such as Mbaya (2016) and Mburu (2017) which might be subjective compared to secondary data. The current study leveraged on this gap by answering the research question; what is the effect of CSR on FP of commercial banks in Kenya?

1.3 Objective of the Study

To determine the effect of corporate social responsibility on financial performance of commercial banks in Kenya

1.4 Value of the Study

The findings will be beneficial to scholar, future researcher and academicians who wish to undertake related or similar studies will find this study beneficial. In addition the findings will benefit researchers and scholars in identifying related fields of research by citing topics requiring additional empirical studies to determine study gaps.

To policy makers for instance the CBK, the government and the NSE, the study will be beneficial as they could use the findings and recommendation to develop vital policies for mitigating the effects of macroeconomic factors in the country on stock market returns at the NSE.

The study will also aid in development of theory. There are the theoretically expected association amongst the CST and FP this study will either confirm or disapprove the held hypothesis and in so doing help in development of theory in this area.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The purpose of this section is to present a review of the theories onto which this study is based. Prior empirical work on this subject and other related areas will be reviewed in this chapter. Additionally, the determinants of FP will be reviewed and a framework illustrating the relationship the variables have will be contained in the study.

2.2 Theoretical Framework

This section reviews the stakeholder theory, triple bottom line theory and the agency relationship theory.

2.2.1 Stakeholder Theory

This is the anchor theory of the current study. Freeman (1984) pioneered this theory. This theory indicates that firms have stakeholders who either reap benefits or are negatively impacted by business activities. Initially, a stakeholder would represent any person or entity affected by activities, failures or success of a business (Fontaine et al., 2006). The organization will refer to a group of all stakeholders aiming at managing the interests of stakeholders fully. A need exists of differentiating stakeholders which could be achieved by categorizing them into classifiable relations with the business (Fontaine, Haarman, & Schmid, 2006). Key stakeholders include: business customers, suppliers, investors, employees, community, Government and its shareholders (Friedman & Miles, 2006).

Freeman (1984) argues that the relationship of the firm with the various groups of stakeholders affects the decision-making process as this theory is focused on the type of associations for the outcome of the firm activities. This theory is thus interested in

the mode of interdependence in relation to the outcomes from the business and the firm's stakeholders since such groupings can influence the processes of decision making (Wanyama & Olweny, 2013).

Contextually, this theory will be used to interrogate bank functions, starting with philosophical guidelines or moral identification for its management and operation. As pertaining this, managers and leaders of banks should have constructive interactions and contributions to their stakeholders so as to achieve desired results for instance, business growth, profitability growth and stability of the organization, thus boosted performance of the bank. This theory is relevant to the study variables as CSR is aimed at ensuring the stakeholders of the firm are taken into account and by so doing financial performance of the firm is likely to improve.

2.2.2 Triple Bottom Line Theory

The theory was developed by Elkngton in 1994. This theory postulates that a corporation is a moral community associate. As such, a corporation has social responsibilities. The focus of the theory is on a corporation's long term sustainability. The theory holds that a firm ought to consider its actions at three independent measures. These are the social, economic and environmental sustainability (Elkington, 2004).

There exist seven key drivers of this theory which are markets, transparency, technological life-cycle, partnerships, values, corporate governance and time (Elkington, 2004). The drivers are also called revolutions. It is posited that the first revolution is driven by competition, mostly through markets. An increasing number of firms are being challenged by financial markets and customers pertaining given issues of their TBL performance in financial perspective and commitments. The second is pushed by a change in societal and human values. On the third concerning transparency,

it is indicated that business entities will encounter themselves having undertakings under great scrutiny (Elkington, 2004).

Life-cycle technology is the fourth revolution. Organizations are being tasked on TBL implications on either agricultural or industrial activities. The fifth revolution is predicted to forge new partnerships among organizations. The sixth seeks to enhance a massive shift in the organizational understanding of time management. The final revolution is on governance. It stated that with a suitable corporate governance model, an organization is better placed since such governance helps in building a sustainable capitalism (Elkington, 2004). In regards to TBL, the focus of banks should be on drivers that would positively enhance their performance. The theory is relevant to the current study as it hypothesizes that when a firm engages in CSR, its sustainability is ensured which would in essence lead to improved financial performance.

2.2.3 Agency Relationship Theory

This theory was developed by Jensen and Meckling (1976). The agency relationship is the most common mode of social interaction. According to Ross (1973), agency theory states that during a transaction, the principal assigns an agent to act on his or her behalf. The principal needs to trust the agent under imperfect information and unclear outcomes. The agent being one of the stakeholders as an employee needs to be motivated to be able to improve on the firm's financial performance. This brings a sense of ownership of the agent to the firm and improves the principle-agent relationship.

Friedman (1970) criticizes the agency theory of CSR that there is only one business' social responsibility. This responsibility is using the firms' resources and involving itself in activities structured to improve on its profits as long as it's staying within the rules of engaging in free and open contest without fraud. Friedman prefers the state to

address social problems. He argues that costs relating to the CSR activities, human capital could increase the overall costs of the firm.

Some researchers have pointed out that agency theory can be used to show that a positive association between CSR and financial performance of firms (Malmir et al., 2014). Managers are expected to utilize the resources in their control to act in a manner that enhances citizens' welfare and this will lead to overall firm performance. In this study, agency theory is useful as it informs the association between CSR and financial performance. The limitation of this theory is that when there is objective consistency between the principal and agent, theory is quiet. Just when there is objective incongruence between the two is the theory relevant.

2.3 Determinants of Financial Performance

The determination of an organization's FP can be ascertained by a number of factors; these factors are either internal or external. Internal factors differ from one bank to the next and are within a bank's scope of manipulation. These consist of CSR, capital size, quality of management, efficiency of management, deposit liabilities, credit portfolio, policy of interest rate, ownership and bank size. External factors affecting the a bank's performance are mainly gross domestic product, inflation, stability of macroeconomic policy, political instability and the rate of interest (Athanasoglou, Brissimis & Delis, 2005).

2.3.1 Corporate Social Responsibility

According to Kanwal, Khanam, Nasreen and Hameed (2013), it is important to understand CSR since it impacts the firm's financial performance. Management of firms consider that CSR is capable of growing profits. Additionally, they believe that CSR has the ability to uphold respect of the firms in the market. As a result, CSR would

then result to better sales for the firm, attraction of competent workforce and eventually increase in financial profitability of their organizations (Robins, 2015).

When Firms spends on activities of CSR, it helps on the sustainability of the firm in the long run and also improvement of the FP. A study explored the relationship between the performance of banks and CSR. The interest of the study was 318 firms in China that had restructured between the period 1997 and 2003. The findings of the study revealed that firms that restructured encountered significant decrease in profits within the immediate 3-year period (Zu, 2009). The study placed emphasis on the integration of an understanding of CSR, which is considered imperative in developing informed knowledge on the need and importance of adopting CSR and overall impact on promoting the level of business growth and development.

2.3.2 Bank Size

The level at which a firm is affected by financial or legal factors is determined by the bank size. There is a close connection of capital adequacy and the size of a bank mainly due to the fact that large banks are able to obtain capital that is less expensive which enables them to make big profits. There is a positive association between size of a bank and return on assets showing that large banks are able to take advantage of economies of scale and minimize on costs of operations therefore enabling the banks to increase the financial performance (Amato & Burson, 2007). Magweva and Marime (2016) related capital ratios with bank size suggesting that they have positive relationship amongst themselves implying that as the bank size grows profitability increases.

According to Amato and Burson (2007), the size of an organization is primarily determined by the amount of assets it owns. An argument can be made that the larger the assets a firm owns, the more its ability to undertake a large number of projects with

greater returns in comparison with small firms with a smaller amount of assets. Additionally, the bigger the firm, the larger the amount of collateral that can be pledged in a move to access credit facilities in comparison to their smaller competitors (Njoroge, 2014). Lee (2009) concluded that the amount of assets in control of a firm has an influence on the level of profitability of the said firm from one year to the next.

2.3.3 Bank Liquidity

Bank liquidity is the capacity of banks to accomplish their monetary obligations when they fall due. Dang (2011) hold a view that adequate of liquidity in banks is positively linked with their success. Liquidity risk control is an obligatory factor of the general risk mitigation charter for all financial institutions. An efficient bank ought to adhere to a well-documented framework for alleviation of liquidity risk and shun losses (Adam & Buckle, 2003). Liargovas and Skandalis (2008) suggest that customer deposits offer an innate cushion against liquidity risk in commercial banks. The banking sector is interconnected meaning cash flows in one bank harmonize other banks whereby the inflows hedge other banks from outflows emanating from customer withdrawals and loan advancements. This assertion underpins the need for risk management in commercial banks since, banks use deposits to hedge against the liquidity risk.

There are contradictory views on whether liquidity influences financial performance of commercial banks. Almajali et al. (2012) note that liquidity risk has a positive correlation to net interest margin which implies that banks with substantial liquidity levels earn higher interest revenue. On the flipside, Jovanovic (1982) documented that an inverse relation exists amid bank success and liquidity.

2.3.4 Capital Adequacy

Athanasoglou et al. (2005) asserts that when the banks financial performance is being determined it is necessary to consider capital since it is a significant variable. Capital is the contribution of the owners to the business for supporting the banks operations and it also protects the banks against an adversity. In imperfect capital markets, banks that are properly capitalized ought to minimize its borrowing in order to support certain classes of assets and hence be able to reduce likelihood of bankruptcy costs as they tend to face lower funding costs.

Banks that are well capitalized signals to the market that they should expect a performance that is above average. Athanasoglou et al., (2005) noted that banks profitability is positively affected by the capital contributed, that show good financial condition of Banks in Greece. In addition, Berger et al., (1987) revealed a positive causality of capital contribution and firms' profitability in both directions.

2.4 Empirical Review

Local and international studies have been done to support the relationship between CSR and FP, but these studies have produced mixed results.

2.4.1 Global Studies

Sharma and Mani (2013) carried out a survey study that was descriptive in nature in India aiming at determining engagement of commercial banks in India in CSR showed that banks are putting measures in sustainable marketing areas though there was a need for further emphasis on the same. The study looked forward to gaining an understanding on Indian banks social responsibility performance gaps. The study showed that some banks were not even adhering at regulatory requirements. The banks in public sector at

overall levels had the greatest contribution in marketing sustainability activities, whereas the foreign banks and private sector banks lagged behind in this sector.

Ofori (2015) conducted a descriptive survey in Ghana that aiming at showing the magnitude of nature, recognition, content and sustainable marketing perceptions by firms listed on GSE. The study revealed that for managers consider that for a firm to successfully operate in a society, then the organization must engage in supporting society's social endeavors. The aim of the study was to investigate sustainable marketing activities conducted by firms quoted at GSE. Sustainable marketing is termed as being past philanthropic patterns of entities but more so a strategic focus trying to fulfil society's needs while having in mind the key objective of the organization which is to maximize profits at all costs.

Hirigoyen and Rehm (2018) explored the association between different components of CSR (human rights in work place, human resource, respect for environment, societal commitment, and government and market behavior) and financial performance (return on assets, market to book ratio, return on equity) of 329 quoted firms in U.S. Asia pacific region and Europe and between the time frame 2016-18. Using linear regression analysis, the researchers' concluded that CSR does not have any impact on financial performance; further, it is negatively associated to each other.

Deng, Kang and Low (2018) ponder the blow of corporate social obligation on the maximization of the value of stakeholder among US firms that had consolidated. The investigation utilized an extensive example of mergers in the US, to decide if a connection exists between CSR and shareholders of the company. The study utilized regression and correlation procedures in analysis of data by use of SPSS. The finding was that in relation to low CSR system incorporation, high CSR application were found

to acknowledge higher merger declaration profits and declaration returns for the value weighted portfolio of the acquirer and the objective, and bigger increments in post-merger performance of long-term operation. Also, huge acquirers acknowledged stock returns for a long-term period.

Stratling (2018) looked to research and find out whether there is an important relationship between corporate administration and CSR reporting processes among commercial banks in the US. The examination utilizes regression analysis to test the connection between the corporate administration factors and the CSR exposure. The corporate administration standards utilized included foreign ownership, managerial ownership, independence of the board, public ownership, availability of the audit committee and duality of the CEO influences hierarchical reaction to different groups of stakeholders. The results of the study recommend that weights applied by external stakeholder groups and instruments of corporate administration including independent outsiders may alleviate a few interests relating to family effect on CSR reporting activities.

2.4.2 Local Studies

Mbaya (2016) assessed the effects of CSR programs on organizations' financial performance in Kenya. The study's focus was on the Kenyan telecom industry. An interview guide was used as a research instrument and the data was collected using questionnaire where they were dropped and picked later. Data was analyzed and finding were recorded using tables and figures. The procedure involved tallying the responses, calculating the variance in responses and description and interpretation of data as per the study objective by use of SPSS. The findings are based on a 90% (n=10) response

rate. The conclusion of the study was that CSR has a positive influence on an organization FP.

Mosoti (2016) wanted to determine the effects of CSR on financial performance in the telecom industry. The population targeted was the telecommunication industry and to carry out the study a cross sectional survey was used. The span of the study was 10 years and data was gathered for the same period then analyzed with the aid of SPSS for both multiple regression and correlation analysis so as to establish the variables relationship. The findings showed that FP measured suing ROE and ROA significantly related to CSR in all the studied companies. The study recommended the telecommunications firms ought to be involved in CSR activities since it enables them broaden the customer base and ultimately raise their profit which automatically led to improved financial performance.

Moraa (2016) aimed on establishing the association amongst CSR and Financial performance in all Kenyan banks. This study used descriptive survey and indicated the mean and standard deviation of the various variables. All the commercial banks operating in Kenya were the study's population and they period was studied was 7 years from 2009 to 2015. SPSS version 21 package was used to do the data analysis. FP was the dependent variable while CSR was the independent variable. The study showed the correlation coefficient, the correlation matrix, the analysis of variance and the regression model coefficients. The study shown a positive connection amongst the two variables.

Mburu (2017) sought to investigate how practicing CSR impacts organizational performance at L'Oreal East Africa Ltd. The researcher chose a case study research design. The researcher collected primary data through an interview guide. The results

found that CSR affects corporate financial performance of the organization largely through increased demand for organizational products, bringing the organization closer to the public, growth in sales and developing social responsible culture to the company. Additional, it was found out that CSR activities enhanced organization reputation that consequently made it able to build positive relationships and win trust from the customers and consequently growing the sales ultimately attaining a competitive advantage.

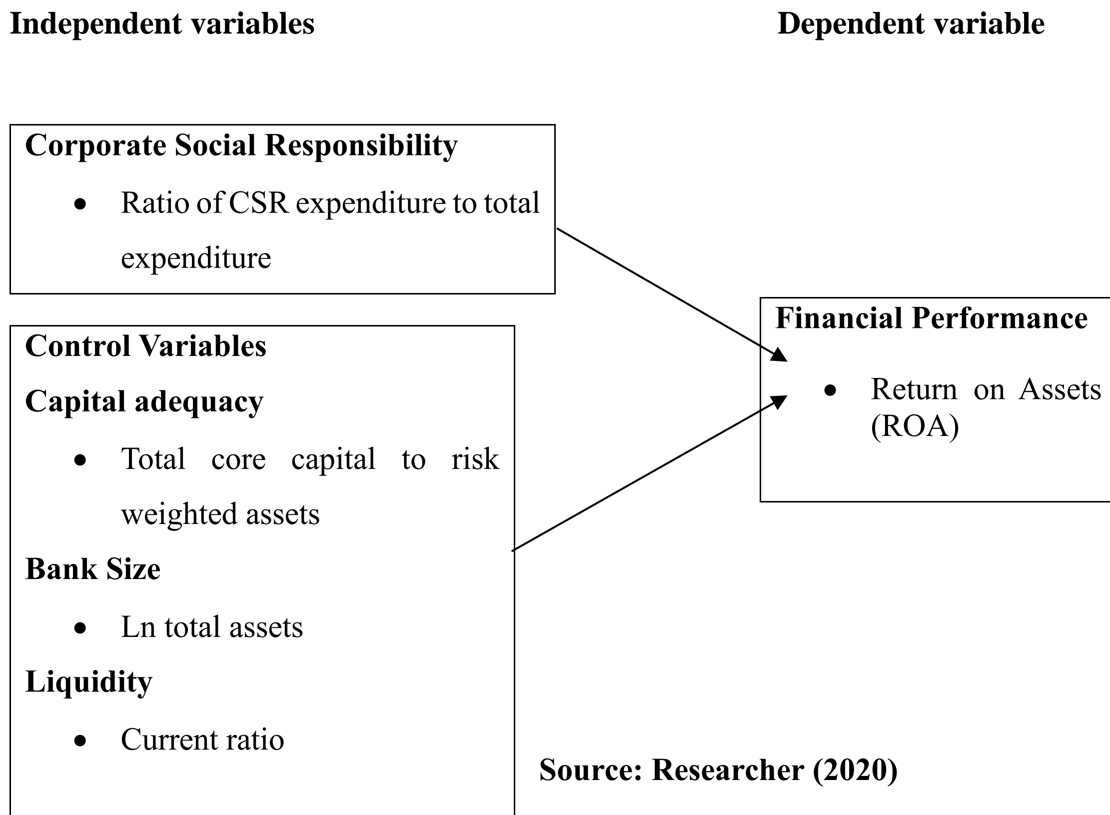
Ng'ang'a (2018) aimed establish how corporate social responsibility impacts performance of commercial banks in Kenya. Descriptive survey design which was essential in achieving the objectives of the study was adopted. The study's population comprised of the banks from 2013 to 2017. The study relied entirely on secondary data. The study demonstrates that all commercial banks in Kenya stand to benefit from being socially responsible. It is to the advantage of commercial banks in Kenya to consider creating a department for CSR. The number of environmental CSR activities and the number of health CSR activities were found to have a high significance on FP of banks while liquidity was found to have a very weak significance on performance of banks.

2.5 Conceptual Framework

The conceptual model developed below portrays the expected association existing between the variables. The predictor variable was CSR as given by the ratio of CSR expenditure to total expenditure. The control variables were capital adequacy as given by the ratio of core capital to risk weighted assets, bank size as measured by natural logarithm of total assets and liquidity as measured by liquid assets divided by total

assets. FP was the response variable that the study aimed on explaining and it was given by return on assets.

Figure 2.1: The Conceptual Model



Source: Researcher (2020)

2.6 Summary of the Literature Review

Several frameworks have described the anticipated theoretical relation existing between CSR and FP among banks. The theories covered in this review are; stakeholder theory, agency theory, and triple bottom line theory. Determinants of firm efficiency that are primary have also been discussed in this section. Both international and local empirical studies have been done on CG and firm efficiency. The findings related to these studies have also been discussed in this section.

Moraa (2016) focused on the relationship between CSR and FP of commercial banks in Kenya and concluded that there exists a positive relationship. Ng'ang'a (2018) focused on the effect of CSR on performance of commercial banks in Kenya. The

study demonstrates that all commercial banks in Kenya stand to benefit from being socially responsible. Many studies conducted locally have concentrated on all commercial banks without specifically studying the differences among the various tiers of commercial banks. In addition, most of the previous researchers used primary data which is subjective compared to secondary data. The current study leveraged on this gap by answering the research question; what is the effect of CSR on FP of commercial banks in Kenya?

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

A methodology was required in outlining how the research was done to ascertain how the FP of banks in Kenya is affected by CSR. Sections incorporated in this chapter are; research design, data collection, diagnostic tests and data analysis.

3.2 Research Design

The research utilized a descriptive cross-sectional research design in determining how CSR and FP of banks relate. The researcher sought to describe the nature of affairs as they are (Khan, 2008) hence making the design suitable for the study. It is also appropriate because the nature of the phenomenon being studied and how they relate is of major interest to the researcher. Additionally, a descriptive research provided an accurate and valid variables representation that aided in providing a response to the research question (Schindler &, Cooper 2013).

3.3 Population

A population is the totality of observations of interest from a collection such as events or persons as specified by a research investigator (Burns & Burns, 2008). This study's population comprised of the 42 commercial banks operating in Kenya as at 31st December 2019. Since the population was relatively small, a census of the 42 banks was undertaken for the study (see appendix I).

3.4 Data Collection

Secondary data was exclusively relied upon on this study. The source of the secondary data was the published annual financial reports published by banks between January 2015 and December 2019 and captured in a data collection sheet. The reports were

obtained from the CBK web page and banks annual reports. The end result was annual information concerning the predictor variables and the response variable. The specific data collected included net income, total assets, CSR expenditure, total expenditure, liquid assets, customer deposits, risk weighted assets and total capital.

3.5 Diagnostic Tests

The study undertook several diagnostics test to assess the applicability of the research structure. The study first assessed for normality which through the Kolmogorov-Smirnov and Shapiro-Wilk tests of the residuals where in both tests, a non-important result (a p factor of greater than 5%) was deemed an indication for normality. The study also assessed for multicollinearity using the tolerance and the variance inflation factors (VIF) where a tolerance figure of greater than 0.2 or a VIF or more than 10 was an indication of the presence of multicollinearity. Additionally, stationarity test was used to assess whether statistical properties such as mean, variance and autocorrelation structure vary with time. Stationarity was obtained using augmented Dickey Fuller test. In case, the data fails the assumption of stationarity, the study used robust standard errors in the model. The study also assessed for serial correlation (autocorrelation) using the Durbin Watson test where a value of between 1.5 and 2.5 indicated that there exists no auto-correlation (Burns & Burns, 2008).

3.6 Data Analysis

After the data is collected from the numerous sources, it will be arranged in a way that was able assist to address the research objective. The SPSS computer package version 23 was applied in analyzing the data. Descriptive statistics were used to calculate the measures of central tendency as well as dispersion together with standard deviation for each variable. Inferential statistics on the other hand will entail correlation and

regression analysis. Correlation analysis involved establishing the degree of relationship amongst the study variables whereas regression analysis entailed knowing the cause and effect between the variables. A multivariate regression analysis was utilized in determining the association between the dependent variable and independent variables

3.6.1 Analytical Model

The regression model below was used:

The four independent variables have been hypothesized to have an influence on FP from review of literature and therefore need to test the hypotheses.

$$Y= \beta_0 + \beta_1X_1+ \beta_2X_2+ \beta_3X_3 + \beta_4X_4 +\varepsilon.$$

Where: Y = Financial performance given by return on assets on an annual basis

β_0 =y intercept of the regression equation.

β_1, β_2, β_3, β_4 =are the slope of the regression

X_1 = CSR as measured by the proportion of CSR expenditure divided by total expenditure on an annual basis

X_2 = Capital adequacy as measured by the ratio of total core capital to risk weighted assets on an annual basis

X_3 = Bank size as measured by the natural logarithm of total assets on an annual basis.

X_4 = Liquidity given by liquid assets to total assets on an annual basis

ε =error term

3.6.2 Tests of Significance

Parametric tests will be conducted so as to determine the statistical significance of the overall model as well as individual parameters statistical significance. The F-test which

will be obtained from ANOVA will be applied in establishing the overall model statistical significance while that of the individual variables will be obtained from the t-test.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This section details the analysis, findings and elucidation of the secondary data obtained from the CBK and individual banks websites. The aim of the study was determining the effect of CSR on the FP of commercial banks in Kenya. The independent variables for the study were CSR, capital adequacy, liquidity and bank size while the dependent variable was the FP measured by ROA. Regression analysis was adopted to determine the effect between the variables of study in relation to the study's objectives. In ascertaining the suitability of the analytical model, ANOVA was applied. The results were presented in tables and figures.

4.2 Descriptive Analysis

The statistics produces a representation of the mean, minimum and maximum values of variables presented including the standard deviations, skewness and kurtosis. Table 4.1 below displays the qualities of each variable. An output of each variable was extracted using SPSS software for a five-year time frame (2015 to 2019) on an annual basis.

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	185	-.245	.174	-.005	.0308
CSR	185	.0004	.312	.044	.0713
Capital adequacy	185	.201	2.17	.236	.2173
Bank size	185	14.8	20.6	17.726	1.3658
Liquidity	185	.0205	.285	.077	.0537
Valid N (listwise)	185				

Source: Research Findings (2020)

4.3 Trend Analysis

Trend analysis was conducted for corporate Social Responsibility, Capital adequacy, bank size, liquidity and financial performance. The Trend analysis is presented in the following subsections.

4.3.1 Corporate Social Responsibility

The study sought to establish the trend in the banks expenditure in corporate social responsibility over the period of the study. The analysis was conducted by classifying the commercial banks in tiers (Tier 1, Tier 2 and Tier 3). Tier 1 banks were found to have the highest spending in corporate social responsibility followed by Tier 2 commercial banks. Tier 3 had the least expenditure in Corporate Social Responsibilities. The findings are presented in Figure 4.1 below.

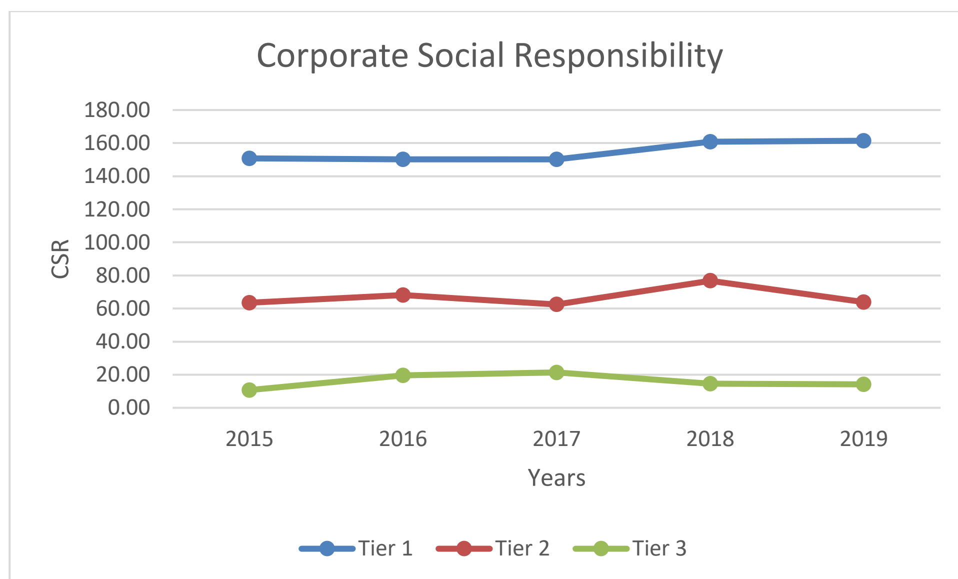


Figure 4.1: Corporate Social Responsibility

4.3.2 Capital Adequacy

The study sought to establish the trend in the capital adequacy over the period of the study. The analysis was conducted by classifying the commercial banks in tiers (Tier 1, Tier 2 and Tier 3). From the analysis it is evident Tier 1 and Tier 2 banks had a higher

capital adequacy in the year 2015 while. In 2015 the capital adequacy of Tier 3 banks went up while the Tier 1 and Tier 2 capital adequacy went down. From year 2016 the capital adequacy ratio of all the banks have stabilized with Tier 1 banks averaging at slightly below 0.2 and Tier 1 and 2 banks at 0.2 and sometimes above. Figure 4.2 shows the findings.

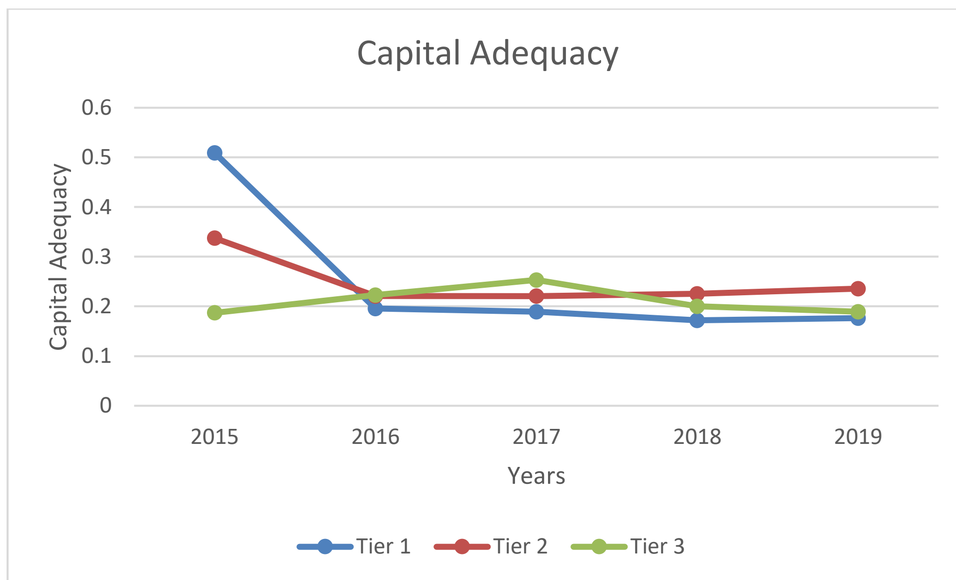


Figure 4.2: Capital Adequacy

4.3.3 Bank Size

The study sought to establish the trend in the bank size over the period of the study. The analysis was conducted by classifying the commercial banks in tiers (Tier 1, Tier 2 and Tier 3). Bank size was measured as the natural logarithm of total assets. As expected, Tier 1 banks are the largest banks in terms of total assets followed by Tier 2 and finally Tier 3 banks depicts smallest size. The results are presented in the figure 4.3 below.

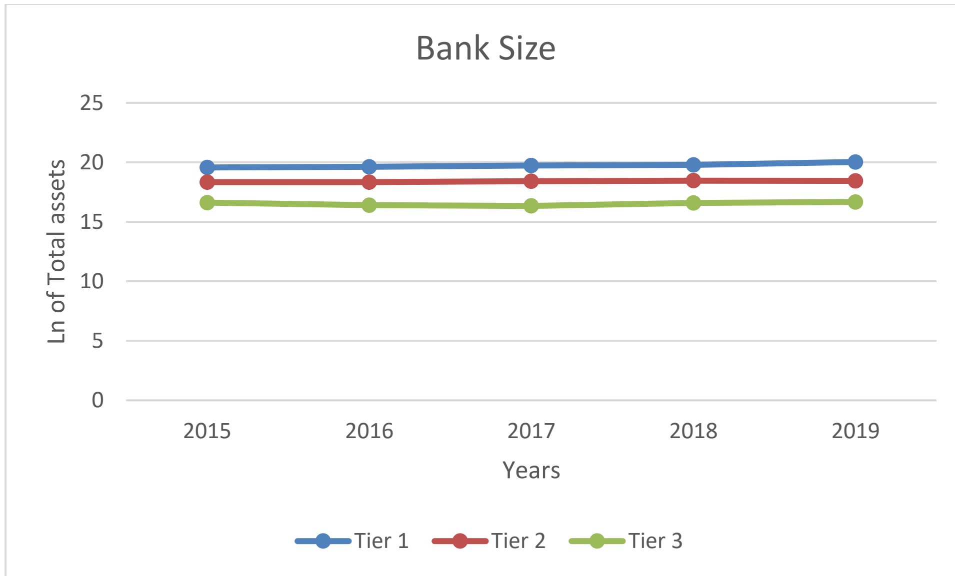


Figure 4.3: Bank Size

4.3.4 Liquidity

The study sought to establish the trend in the liquidity over the period of the study. The analysis was conducted by classifying the commercial banks in tiers (Tier 1, Tier 2 and Tier 3). As shown in the trend analysis, in 2015 Tier 1 had banks had the highest liquidity followed by Tier 3 banks and tier 2 banks being the least liquid. However, from year 2016 the Tier 3 have maintained the highest liquidity with tier 2 being more liquid than Tier 1 banks. The findings are as shown in Figure 4.4 below

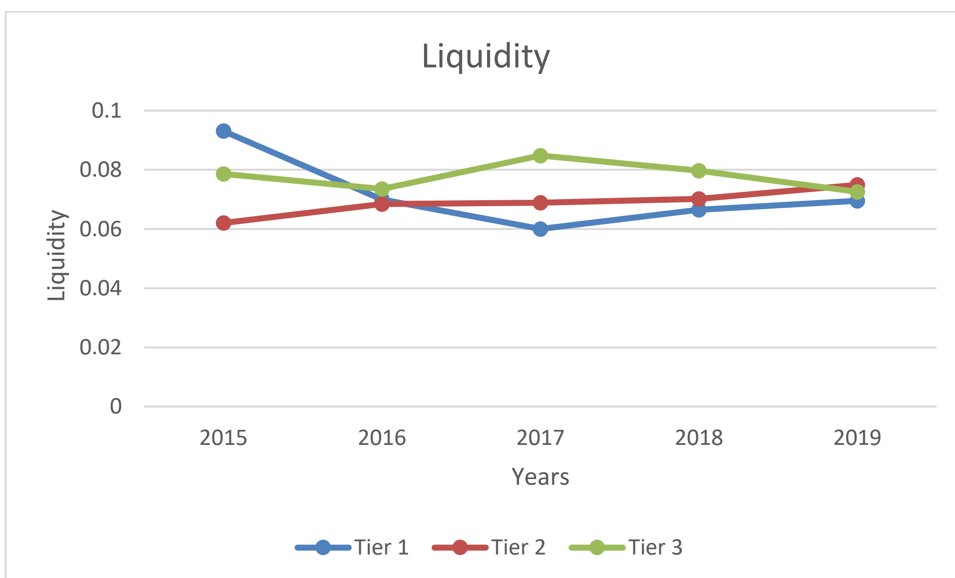


Figure 4.4: Liquidity

4.3.5 Financial Performance

The study aimed on determining the trend in the FP of commercial banks in Kenya over the period of the study. The analysis was conducted by classifying the commercial banks in tiers (Tier 1, Tier 2 and Tier 3). Financial performance was measured by ROA. The financial performance of Tier 1 banks was higher than the rest reporting highest ROA over all the years. Tier 2 banks followed tier 1 banks and Tier 3 banks financial performance was least. Figure 4.5 shows the results.

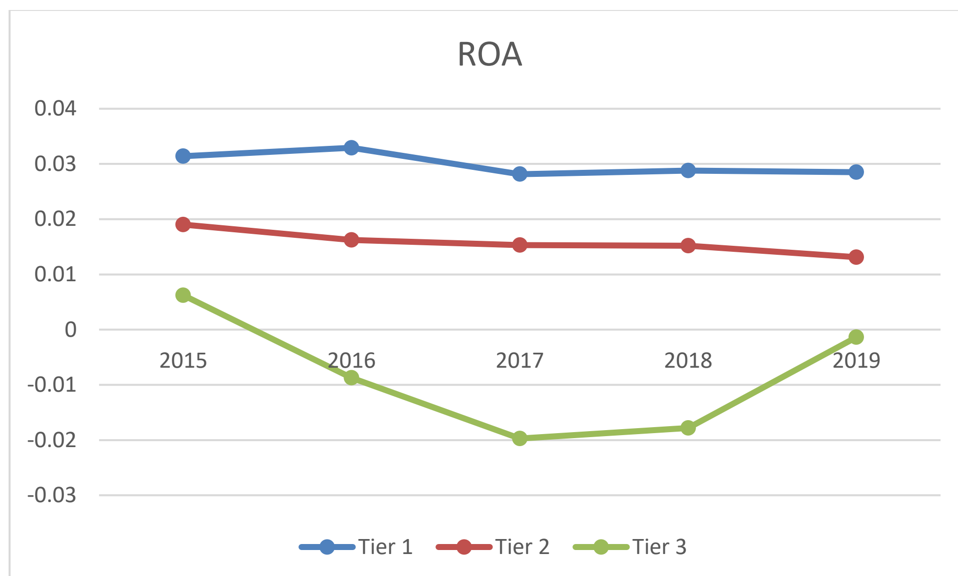


Figure 4.5: Financial Performance

4.4 Diagnostic Tests

The data collected was subjected to diagnostic tests. The study presumed a significance level of 5% or 95% confidence interval so as to make variable deductions on the data adopted. Diagnostic tests were useful for ascertaining the falsity or truth of the data. Therefore, the nearer to 100% the confidence interval, the more accurate the data used is presumed to be. In this case, the tests conducted were stationarity test, normality test Multicollinearity test and autocorrelation test.

4.4.1 Stationarity Test

In nature, most economic variables before undertaking regression analysis are mainly non-stationary. Therefore, unit root test was carried out using Augmented Dickey-Fuller (ADF) in testing whether the variables were non-stationary or stationary. The reason for undertaking this was preventing false regression outcomes from being found through use of stationary series. As shown in Table 4.2 below, the variable at a 5% level of significance were stationary. Henceforth, there was no necessity of differencing some of the variables.

Table 4.2: Stationarity Test

Variable name	ADF test	5% Level	Prob	Comment
ROA	-3.753547	-3.540328	0.0312	Stationary
CSR	-4.262276	-3.540328	0.0093	Stationary
Capital adequacy	-3.98997	-2.91452	0.0043	Stationary
Bank size	-2.78574	-1.53674	0.0381	Stationary
Liquidity	-3.453231	-3.23456	0.0037	Stationary

Source: Research Findings (2020)

4.4.2 Normality Test

Shapiro-wilk test and Kolmogorov-Smirnov test was utilized for normality testing. The level of significance in the study was 5%. The outputs of the test are depicted in Table 4.3. The null hypothesis is that the data is distributed normally. If the Shapiro-wilk test and Kolmogorov-Smirnov tests contradict, the later test is picked over the former because it is more statistically sound. Since the p value in both tests of all the variables is greater than the α (0.05), then the null hypothesis is not rejected. Hence the data series of all the variables is normally distributed.

Table 4.3: Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
ROA	.173	185	.264	.918	185	.822
CSR	.180	185	.264	.894	185	.790
Capital adequacy	.176	185	.264	.892	185	.784
Bank size	.181	185	.264	.896	185	.792
Liquidity	.188	185	.264	.892	185	.788

a. Lilliefors Significance Correction

Source: Research Findings (2020)

4.4.3 Autocorrelation Test

To test for autocorrelation, Durbin-Watson statistic was applied which gave an output of 2.045 as displayed in Table 4.4. The Durbin-Watson statistic ranges from point 0 and point 4. If there exist no correlation between variables a value of 2 is shown. If the values fall under point 0 up to a point less than 2, this is an indication of an autocorrelation and on the contrast a negative autocorrelation exist if the value falls under point more than 2 up to 4. As a common rule in statistics, value falling under the range 1.5 to 2.5 are considered relatively normal whereas values that fall out of the range raise a concern. Field (2009) however, opines that values above 3 and less than 1 are a sure reason for concern. Therefore, the data used in this panel is not serially autocorrelated since it meets this threshold.

Table 4.4: Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.541[a]	.293	.277	3.2638	2.045

a. Predictors: (Constant), Liquidity, Capital adequacy, Bank size, CSR

b. Dependent Variable: ROA

Source: Research Findings (2020)

4.4.4 Multicollinearity Test

Multicollinearity can be defined as a statistical state where more than one predictors are highly correlated in a multiple regression model. It is an unwanted situation for

independent variables to have a strong correlation. A combination of variables is said to exhibit high Multicollinearity in case there is one or more exact linear correlation among the study variables. VIF value and Tolerance of the variable were utilized where the values below 10 for VIF and values more than 0.2 for Tolerance imply no Multicollinearity. From the results, all the variables had a VIF values <10 and tolerance values >0.2 as illustrated in table 4.5 suggesting that no Multicollinearity.

Table 4.5: Multicollinearity Test

	Collinearity Statistics	
Variable	**Tolerance**	**VIF**
CSR	0.392	2.551
Capital Adequacy	0.398	2.513
Bank size	0.388	2.577
Liquidity	0.376	2.659

Source: Research Findings (2020)

4.5 Correlation Analysis

Correlation analysis shows whether there is a relationship amongst two variables. The relation ranges from strong negative correlation to perfect positive correlation. This study utilized Pearson correlation in analyzing the association level amongst ROA and CSR A confidential level of 95% was employed since it's the most common in social sciences. Additionally, a two tailed test was applied. Table 4.6 shows the correlation analysis outcome.

Existence of a positive and statistically significant correlation (r = .260, p = .000) between CSR and FP was revealed. Further results revealed a positive and significant correlation between bank size and commercial banks' performance as demonstrated by (r = .495, p = .000) existed. Capital adequacy was also noted to have a positive and significant association with performance as evidenced by (r = .180, p = .014). Liquidity

exhibited a positive association with FP but the association was not statistically significant as evidenced by a p value above 0.05.

Table 4.6: Correlation Analysis

		ROA	CSR	Capital adequacy	Bank size	Liquidity
ROA	Pearson Correlation	1				
	Sig. (2-tailed)					
CSR	Pearson Correlation	.260**	1			
	Sig. (2-tailed)	.000				
Capital adequacy	Pearson Correlation	.180*	.022	1		
	Sig. (2-tailed)	.014	.765			
Bank size	Pearson Correlation	.495**	.593**	.026	1	
	Sig. (2-tailed)	.000	.000	.721		
Liquidity	Pearson Correlation	.098	.150*	.050	.062	1
	Sig. (2-tailed)	.184	.041	.502	.402	

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
c. Listwise N=185

Source: Research Findings (2020)

4.6 Regression Analysis

At significance level of 5% a regression analysis was carried out between FP and the four predictor variables selected for this study. The F critical value was compared against the F calculated.

Table 4.7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.541[a]	.293	.277	3.2638	2.045

a. Predictors: (Constant), Liquidity, Capital adequacy, Bank size, CSR
b. Dependent Variable: ROA

Source: Research Findings (2020)

From table 4.7, the R-square value was 0.293, implying that 29.3 % of the deviations in FP of commercial banks is due to variations in CSR, capital adequacy, liquidity, and bank size. Other factors not incorporated in the model are attributed 70.7% of the changes in FP. The correlation coefficient (R) value of 0.541 shows that there exist a

moderate association amongst the independent variables included in the study and financial performance.

Table 4.8 provides the outcomes of the ANOVA; the essence of F-test was to establish how significant the model was. The formulae for calculating the critical value for the F test is;

$$\mathbf{F} = (SSE_1 - SSE_2 / m) / SSE_2 / n\text{-}k$$

Where;

SSE = Residual sum of squares,

m = Number of restrictions

k = Number of independent variables.

A critical value of 2.46 was obtained from the F-Test tables. The F statistic indicated in the study findings is more than the critical value, thus the whole model is significant to predict FP.

Table 4.8: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	792.739	4	198.185	18.605	.000[b]
	Residual	1917.417	180	10.652		
	Total	2710.157	184			

a. Dependent Variable: ROA

b. Predictors: (Constant), Liquidity, Capital adequacy, Bank size, CSR

Source: Research Findings (2020)

To ascertain the significance of each individual variable in this research as a predictor of the performance of banks it was important for t-test to be employed. A p-value was utilized to indicate how significant the association amongst the response and the predictor variables was. Confidence level at 95% and value of p below 0.05 was understood as an index of statistical significance of the concepts. Therefore, a p-value

more than 0.05 depicts an insignificant variable. The outcomes are demonstrated in table 4.9

Table 4.9: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-26.490	3.770		-7.027	.000
	CSR	.018	.045	.031	.393	.695
	Capital adequacy	3.063	1.109	.173	2.762	.006
	Bank size	1.453	.219	.517	6.639	.000
	Liquidity	9.596	4.542	.134	2.113	.036

a. Dependent Variable: ROA

Source: Research Findings (2020)

In indicating both the direction and extent of the relationship amongst the response variable and independent variables the coefficients were used. On the other hand, the significance of the association amongst the dependent and independent variables was shown using the T values. The values identified were compared to the critical values. A confidence interval of 95% and a two tailed t test critical value of ±2.04523 was obtained from the t test tables. A t test value that lies out of this range is significant.

The results revealed that capital adequacy, bank size and liquidity have positive and significant influence on FP. Implication of this is that a unit increment in either capital adequacy, bank size or liquidity will result to an increment in financial performance by 3.063, 1.453 and 9.596 respectively. The findings further revealed that CSR has a positive but not statistically significant influence on FP of commercial banks in Kenya. This implies that a unit increase in CSR will result to an increase in financial performance but the increase is not statistically significant. The constant coefficient -26.490 implies that when the four selected independent variable have a zero value, financial performance would be equal to the figure.

The regression equation below was thus estimated:

$$\mathbf{Y_i = -0.6490 + 0.018X_1 + 3.063X_2 + 1.453X_3 + 9.596X_4}$$

Where;

Y_i= Return on Assets

X_1 = CSR

X_2 = Capital adequacy

X_3 = Bank size

X_4 = Liquidity

4.7 Discussion of Research Findings

The researcher was seeking to assess the influence of CSR on the commercial banks' FP. CSR measured as the amount spent on CSR divided by total expenditure on an annual basis. The control variables were capital adequacy, liquidity and bank size while financial performance of commercial banks measured by ROA was the dependent variable. The adequacy of the overall model in predicting FP was examined. The influence of each predictor variable on the dependent variable was also examined with respect to strength and direction.

From the results of Pearson correlation, a positive and statistically significant correlation between CSR and financial performance exists. Further a positive and significant correlation between bank size and commercial banks' performance existed. Capital adequacy was also noted to have a positive and significant association with performance. Only liquidity was found to have a positive but insignificant association with FP.

The independent variables from the model summary revealed that: CSR, liquidity,

capital adequacy, management efficiency, bank size and off-balance sheet financing explains 29.3% of variations in the dependent variable according to the R square which suggests that 70.7% changes in performance is explained by factors not incorporated in this model. With the F-value at 13.692 the model was considered suitable at 95% confidence level. This means that the model is suitable to be used to predict and explain how commercial banks' FP is affected by the independent variables. This implies that CSR, capital adequacy, liquidity and bank size are good predictors of financial performance.

This study agrees with Hirigoyen and Rehm (2018) who explored the association between different components of CSR (human rights in work place, human resource, respect for environment, societal commitment, and government and market behavior) and financial performance (return on assets, market to book ratio, return on equity) of 329 quoted firms in U.S. Asia pacific region and Europe and between the time frame 2016-18. Using linear regression analysis, the researchers' concluded that CSR does not have any impact on financial performance; further, it is negatively associated to each other.

The study also agrees with one done by Mbaya (2016) who assessed the effects of CSR programs on organizations' financial performance in Kenya. The study's focus was on the Kenyan telecom industry. An interview guide was used as a research instrument and the data was collected using questionnaire where they were dropped and picked later. Data was analyzed and findings were recorded using tables and figures. The procedure involved tallying the responses, calculating the variance in responses and description and interpretation of data as per the study objective by use of SPSS. The

findings are based on a 90% (n=10) response rate. The conclusion of the study was that CSR has a positive influence on an organization FP.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The main goal of the study was determining how CSR influence performance of Kenyan banks. This chapter gives an overview of the results from the previous chapter, conclusion, limitations encountered during the study. Moreover, it recommends policies that policy makers can use. Additionally, the chapter gives recommendations for future researchers.

5.2 Summary

The aim of the research was to ascertain how CSR influence FP of banks in Kenya. To conduct the study, CSR was operationalized as the ratio of CSR expenditure to total bank expenditure on an annual basis, capital adequacy as given by the ratio of core capital to risk weighted assets, liquidity as measured liquid assets divided bytotal assets and bank size given as the natural log of total assets. FP was the response variable that formed the scope of the study and it was given by return on assets. The researcher reviewed available theoretical foundations and empirical reviews to get an understanding on the generally accepted relationship among the selected dependent and independent variables. From this review, a conceptual framework was developed that hypothesized the expected association between the study variables.

Descriptive research design was employed. All the 42 commercial banks as at December 2018-year end comprised the population of this study and from this, data was obtained from 37 banks giving a response rate of 88.10%. Data secondary in nature was acquired from CBK and individual banks financial reports for a time frame 5 years spanning 2015 to 2019. The researcher carried out descriptive, correlation analysis as

well as regression analysis. So as to confirm that the data is fit for analysis the researcher transformed the data using natural logarithms and conducted diagnostic tests to make sure that the data has the required characteristics before conducting inferential statistics. Regression analysis was applied in testing the strength of the association between the study variables and to test both the significance of the overall model and individual parameters. SPSS software version 23 was used to carry out the analysis.

Pearson correlation showed that CSR and FP were positively and significantly correlated. Further a positive and significant correlation between bank size and commercial banks' performance existed. Capital adequacy was also noted to have a positive and significant association with FP of commercial banks in Kenya. Liquidity was however found to have a positive but insignificant association with financial performance.

The coefficient of determination similarly denoted as the R square shows the disparities in the response variable triggered by changes from the predictor variable. As indicated by the findings, R square was 0.293, an indication that 29.3.6% of the variations in performance stems from variations in CSR, capital adequacy, liquidity, and bank size. Other factors that have not been incorporated in this model make up 70.7% of the variation in financial performance. Correlation analysis results revealed that the chosen variables strongly correlated with FP of banks (R=0.541). Further findings of ANOVA test indicated the F stastistic was significant at the 5% level of significance with P value being 0.000. This indicated that the model was suitable in explaining the variables relationship.

The study further found that an increment in a unit in capital adequacy, bank size or liquidity will result to an increment in financial performance by 3.063, 1.453 and 9.596

respectively. The findings further revealed that CSR has a positive but not statistically significant influence on FP of commercial banks in Kenya. This implies that a unit increase in CSR will result to an increase in financial performance but the increase is not statistically significant. The constant coefficient -26.490 implies that when the four selected independent variable have a zero value, financial performance would be equal to the figure.

5.3 Conclusion

The findings of this study show that the FP of Kenyan banks is significantly influenced by capital adequacy, bank size and liquidity. This research shows that an increment in a unit in capital adequacy, bank size or liquidity significantly increases the FP of commercial banks in Kenya. The study also showed that although CSR has a positive influence on financial performance, the influence is not statistically significant and hence the study concluded that CSR does not have a significant effect on financial performance of commercial banks.

The conclusion of this study is that the independent variables selected for this study (CSR, capital adequacy, liquidity and bank size) to a larger extent have a significant influence on bank financial performance in Kenya. The conclusion that these variables have a significant impact on the performance of banks given the p value in ANOVA summary therefore is correct. The findings that 29.3% of the changes in financial performance are due to the six factors incorporated in the model suggest that factors not incorporated in the model accounts for 70.7% of the variations in financial performance.

The study agrees with one done by Moraa (2016) who sought to establish the relationship between CSR and Financial performance in all Kenyan banks. This

study used descriptive survey and indicated the mean and standard deviation of the various variables. All the commercial banks operating in Kenya were the study's population and they period was studied was 7 years from 2009 to 2015. SPSS version 21 package was used to do the data analysis. FP was the dependent variable while CSR was the independent variable. The study showed the correlation coefficient, the correlation matrix, the analysis of variance and the regression model coefficients. The study indicated a positive relationship between the two variables.

5.4 Recommendations for Policy and Practice

Leveraging on the study findings, below recommendations have been drawn. A positive relationship between FP and capital adequacy position was found to exist in this study. Some of the recommendations of this study that will enable policy change include: a heavy investment by banks in capital adequacy since it will enable an improvement in the FP of the banks. It is the responsibility of the Government through the Central bank to formulate policies that will create an enabling environment for commercial banks to operate and increase their capital adequacy as this will favor growth of the economy.

The study showed that FP showed a positive impact with the size of the bank. A recommendation is that banks' management and directors should focus on increasing their asset base by formulating measures and policies centered on enlarging the banks' assets since this has a direct impact on how they perform financially. The results of the study show that the larger the bank (in terms of asset base), the higher the expectation of superior performance in comparison to smaller banks and hence more focus should be on growing their asset base.

A positive association amongst FP and liquidity position was found to exist in this study. Therefore, it is recommended that the banks liquidity position ought to be

thoroughly evaluated in order to ensure that banks operations are at adequate level of liquidity which will yield better performance. This is due to the fact that the liquidity of a firm is highly significant as it affects the currents operations of a firm.

5.5 Limitations of the Study

This study focused on some factors that are hypothesized to influence FP of banks in Kenya. Specifically, the study focused on four explanatory variables. In reality however, there are other variables that are likely to influence FP some which are internal such as management efficiency and leverage while others are not under the control of management such as economic growth exchange rates, balance of trade, and unemployment rate among others.

The study adopted the analytical approach which is highly scientific. The research also disregarded qualitative information which could explain other factors that influence the association between CSR and commercial banks' performance. Qualitative methods such as focus group discussions, open ended questionnaires or interviews can help develop more concrete results.

The research concentrated on 5 years (2015 to 2019). It is not certain whether the findings would hold for a longer time frame. It is also unclear as to whether similar outcomes would be obtained beyond 2019. The study should have been executed over a longer time frame in order to incorporate major forces such as booms and recession.

In achieving the analysis of the data, the study used a multiple linear regression model. Because of the restrictions involved when using the model like erroneous and deceptive outcomes that lead to the value of the variable changing, it was therefore not possible the findings of the study to be generalized with accuracy. More so the result could be

different if more data was added in the regression. Hence the model was another limitation.

5.6 Suggestions for Further Research

A suggestion is given that more research ought to include a qualitative analysis on how CSR and FP of banks in Kenya relate. That study would deal with interviewing of vital respondents in the banks and this would reveal concealed insights into the fine detailed relationship between CSR and FP of banks.

The study did not exhaust all the independent variables influencing performance of Kenyan commercial banks and a recommendation is given that more studies be carried out to constitute other variables for instance ownership structures, industry practices, growth opportunities, political stability and management efficiency. Determining the impact of each variable on financial performance shall enable the policy makers to understand the tools that can be used to control performance.

The research only focused on the commercial banks. The study's recommendations are that further studies be carried out on other financial institutions in Kenya. Future studies can also focus on how CSR influences other aspects other than FP such as credit accessibility by those excluded from traditional banking, poverty eradication and overall economic growth.

The attention of this study was drawn to the latest five years because it was the readily available information. Subsequent studies may cover big time frame like ten or twenty years which can be very impactful on this study by either complementing or disregarding the findings of this study. The advantage of a longer study is that it will enable the researcher to capture effects of business cycles such as booms and recessions.

Finally, this study was based on a multiple linear regression model, which have its own limitations such as erroneous and misleading results resulting from a change in variable value. Future researchers should focus on other models such as the Vector Error Correction Model (VECM) in exploring the various relations CSR and financial performance.

REFERENCES

Adams, M. & Buckle, M. (2013). The determinants of corporate financial Performance in the Bermuda insurance market. *Applied Financial Economics*, 13(2), 133-143

Almajali, Y.A., Alamro, S.H., & Al-Soub, Y.Z (2012). Factors affecting financial performance of Jordanian insurance companies listed at Amman stock exchange. *Journal of Management Research*, 4(2), 91-101

Amato, L. & Burson, T. (2007). The Effects of Firm Size on Profit Rates in the Financial Service, *Journal of Economic and Economic Research*, 8(1), 61- 81

Aupperle, E, Carroll, D., (1985). An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of Management Journal*, 28 (2): 446-463.

Athanasoglou, P., Brissimis, S., & Delis, M. (2005). Bank-specific, industry-specific and macroeconomics determents of bank profitability, *Bank of Greece*, No. 25

Athanasoglou, P., Sophocles, B., & Matthaois, D. (2009). Bank-specific, industry-specific and macroeconomic determinants of Bank profitability. *Journal of International Financial Markets, Institutions and Money*. [Online] 121-136. Available from: http://ssrn.com/abstract:1106825

Baba, F., & Nasieku, A.M. (2001). What do financial intermediaries do? *Journal of Banking & Finance*, 25(3), 271–294.

Berle, A. A. Jr. & Means, G. C. (1932). *The modern corporation and private property*. New York: MacMillan.

Brailsford, T.J., Oliver, B.R & Pua, S.L.H. (2002). On the relation between ownership structure and capital structure, *Accounting and Finance*, 42 (1), 1-26.

Bull, I. (2001). Financial performance of leveraged buyouts: An empirical analysis, *Journal of Business Venturing*, 4, 263-79.

Burns, N. & Burns, S. (2008). *The Practice of Nursing Research: Conduct, Critique and Utilization*: 5th Edition: St Louis, Elsevier Saunders

Central Bank of Kenya (2013).*Annual Reports*, Central Bank of Kenya, Nairobi.

Central Bank of Kenya (2018).*Bank supervision annual reports*. CBK. Nairobi.

Cooper, R., & Schindler, S. (2008). *Business research methods.* New York: Mc Grawhill

Crook, H. (2008). *Open Services Innovation.* London: John Wiley & Sons

Daily, C.M. & Dalton, D.R. (2003). The relationship between governance structure and corporate performance in entrepreneurial firms. *Journal of Business Venturing*, 7: 375-386.

Dahlsrud, A. (2008). Corporate social responsibility and environmental management. *Journal of Modern Economy*, 1-13.

Dobers, P. (2009). Corporate social responsibility and developing countries. *Corporate Social Responsibility and Environemntal Management*, 237-249.

Donaldson, L., & Davis, J. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Academy of Management Review, 20(1)*, 65-73.

Deng, X., Kang, J.K & Low. B. S. (2013). Corporate social responsibilities and stakeholder value maximization: Evidence from mergers. *Journal of Financial Economics,* 110(1), 87-109

Duska, R. (2011). Why be a Loyal Agent? A Systematic Ethical Analysis. In N.E.Bowie and R.E. Freeman (Ed.), *Ethics &Agency Theory: An Introduction* (pp. 143-68). New York: Oxford University Press.

Elkington, J. (2004). *Cannibals with Forks: the triple bottom line of 21st century Business*. Oxford: Capstone.

Fama, E.F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88, 288-307

Fontaine, C., Haarman, A., & Schmid, S. (2006, December). *The Stakeholder Theory*. Dayton, USA.

Fernando, A. (2009). *Corporate governance principles, policies and practices*. Dorling Kindersley (India) Pvt. Ltd.

Finn, M. (2007). *Global Corporate Citizenship*. Northwestern University Press.

Flannery, M., & Protopapadakis, W. (2002). Macroeconomic factors that influence aggregate stock returns. *The Review of Financial Studies*, 7(4)751-782.

Freeman, E. R. (1984). *Stakeholder Theory*. Cambridge: Cambridge University Press.

Freeman, R.E. (1999). Response: Divergent stakeholder theory. *Academy of Management Review*, 24(2), 233-236

Friedman, R. E. & Miles, S. (2006). *Stakeholders: Theory and Practice*. Oxford: Oxford University Press.

Friedman, M. (1970). *The social responsibility of business is to increase its profits*. The New York Times Magazine.

Hirigoyen, G., & Rehm, T. (2018). Relationships between corporate social responsibility and financial performance: What is the Causality? *Journal of Business and Management*, 4(1), 18-43

Jizi, M. I., Salama, A., Dixon, R., & Stratling, R. (2018). Corporate governance and corporate social responsibility disclosure: Evidence from the US banking sector. *Journal of Business Ethics*, 125(4),601-615

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360

Jovanovic, B. (1982). Selection and the evolution of industry. *Econometrics*, 50,649-670

Kang, K.H., Lee, S. and Huh, C. (2010). Impacts of positive and negative corporate social responsibility activities on company performance in the hospitality industry. *International Journal of Hospitality Management, 29*(1), 72-82.

Kanwal, M., Khanam, F., Nasreen, S., & Hameed, S. (2013). Impact of corporate social responsibility on the firm's financial performance. *Journal of Business and Management*, 14(5),67-74

Kajirwa, H. I. (2015). Effects of debt on firm performance: A survey of commercial banks listed on Nairobi Securities Exchange. *Global Journal of Advanced Research*, 2(6), 1025-1029

Khan, J. A. (2008).*Research Methodology*. New Delhi. APH Publishing Corporation

Kwon, A. & Song, I. (2011). Capital structure and firm performance: Evidence from Iranian companies. *International Research Journal of Finance and Economics*, 70, 20-29

Lee, J. (2008). *Handbook of quantitative finance and risk management*, Springer Science & Business Media. New York.

Lee, J. (2009). Does the size matter in firm performance? Evidence from US public firms, *Internal Journal of the Economic of Business*, 16(2), 199- 203

Liargovas, P. & Skandalis K. (2008). *Factors affecting firm's financial performance*. The case of Greece, Athens. University of Peloponnese Press.

Maignan, M. & Ferrell, F, (2000). Categorized Corporate Citizenship as a Marketing Instrument: Concepts, Evidence, and Research Directions? *European Journal of Marketing* 35 (3),457-484.

Magweva, R., & Marime, N. (2016). CSR and bank performance in the multi-currency era in Zimbabwe. *African Journal of Business Management*, *10*(15), 373-392

Malmir, Shirvani, Rashidpour, & Soltani. (2014). Citizen relationship management and principal/agent theory. *International Journal of Managing Value and Supply Chains (IJMVSC), 5*(3), 83-90.

Matteson, M,, & Metivier, C. (2016). Corporate social responsibility and triple bottom line. Retrieved on July 01, 2019 from https://philosophia.uncg.edu/phi361- 43 metivier/module-3-social-responsibility-professionalism-and-loyalty/corporatesocial-responsibility-and-the-triple-bottom-line/

Mbaya, P. (2016). *Effects of corporate social responsibility on profitability of the telecommunication firms in Kenya*. Unpublished MSC finance project, University of Nairobi.

Mburu, M. (2017). *The influence of corporate social responsibility on the performance of L'Oreal East Africa Limited*. Unpublished MBA project, University of Nairobi.

Milinovic, C. (2014). Business performance and strategic new product development activities: An empirical investigation. *Journal of Product Innovation Management*, 12(2), 214-23.

Morck, R., Shleifer, A. & Vishny, R. (1997). Management ownership and market valuation: An empirical analysis, *Journal of Financial Economics*, 20, 293-315

Moraa, O. (2016). *The relationship between corporate social responsibility and financial performance for commercial banks in Kenya*. Unpublished MSC finance project, University of Nairobi.

Mosoti, M. (2016). *Effect of corporate social responsibility on financial performance in the telecommunication industry in Kenya*. Unpublished MSC finance project, University of Nairobi.

Ng'ang'a, E. (2018). *Effects of corporate social responsibility on profitability of commercial banks in Kenya*. Unpublished MBA project, University of Nairobi.

Mwangi, M. & Murigu, J. (2015).The determinants of financial performance in general insurance companies in Kenya. *European Scientific Journal*, 11(1), 288 – 297

Njoroge, A. (2014). *Relationship between capital structure and financial performance*. An unpublished masters project from the University of Nairobi

Nyamita, M. O. (2014). *Factors influencing debt financing and its effects on financial performance of State Corporations in Kenya*. Doctorate Thesis. Durban University of Technology.

Nzuve, I. (2016). *Financial performance measurement of manufacturing small and medium enterprises in Pretoria: A multiple exploratory case study*. Unpublished Project. University Of South Africa

Ofori, D. (2015). Corporate Social Responsibility and Corporate Financial Performance: Myth, Reality or Empty Rhetoric. *The African Finance Journal*, 9, 53-68.

Omondi, O. M. & Muturi, W. (2013). Factors affecting financial performance of listed companies at the Nairobi Securities Exchange in Kenya. *Research Journal of Finance and Accounting*, 4 (15), 99 – 104.

Ongore, V.O. (201I). The relationship between ownership structure and firm performance: an empirical analysis of listed companies in Kenya. *African Journal of Business Management*, 12(2), 122-334

Ongore V.O & Kusa G.B (2013). Determinants of financial performance of commercial banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1), 237-252.

Orlitzky, M. Schmidt, F., & Rynes S. (2003), Corporate social and financial performance; A meta-analysis, organisation studies, *Journal of Management* 24(3) 10-15.

Palmer, H. J. (2012). Corporate Social Responsibility and Financial Performance: Does it Pay to Be Good? *CMC Senior Theses*.

Porter, M. K. (2006). Strategy & Society: The Link between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review. 84 (12)*, 78-92.

Pedersen, T., & Thomsen, S. (2000). *The causal relationship between insider ownership, owner identity and market valuation among the largest European companies.* Working Paper, Copenhagen Business School.

Ramirez, R., Selsky, J. (2010). *Business Planning for Turbulent Times: New Methods for Applying Scenarios.* Taylor & Francis.

Rao, K. R. M., & Lakew, T. B. (2012). Determinants of profitability of commercial banks in a developing country: Evidence from Ethiopia, *International Journal of Accounting and Financial Management Research,* 2(3), 1-20

Robin, M. (2015). *Effects of corporate social responsibility on financial performance of manufacturing companies in Kenya*. Unpublished MBA project, University of Nairobi.

Ross, S. (1973). The economic theory of agency, the principal's problem, *American Economic Review*, 63, 134-9.

Sharma, E., & Mani, M. (2013). Corporate Social Responsibility: An Analysis of Indian Commercial Banks. *AIMA Journal of Management & Research*, 12(2), 17-24.

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737-783.

Soloman, R., & Hansen, K. (1985). It's good business. New York: Atheneum.

Sundaram, A.K. & Inkpen, A.C. (2004). The corporate objective revisited. *Organisation Science*, 15(3), 350-363

Turker, D. (2009). Measuring corporate social responsibility: A scale development Study. *Journal of Business Ethics,* 85(4) ,411-427.

Wanyama, D.W. & Olweny T. (2013). Effects of corporate governance on financial performance of listed insurance firms in Kenya. *Public Policy and Administration Research*, 3(4), 96-116

Yahaya, O. A. & Lamidi, Y. (2015). Empirical examination of the financial performance of Islamic banking in Nigeria: A case study approach. *International Journal of Accounting Research*, 2(7), 1-13

Yin, H. & Yang, J. (2013). Bank characteristics and stock reactions to federal funds rate target changes. *Applied Financial Economics*, 23(23), 1755-1764.

Zu, L. (2009). *Socially responsible restructuring and firm's performance: evidence from Chinese enterprises.* PhD thesis, University of Nottingham

APPENDICES

Appendix I: Commercial Banks in Kenya

1. ABC Bank (Kenya)
2. Bank of Africa
3. Bank of Baroda
4. Bank of India
5. Barclays Bank of Kenya
6. Chase Bank Kenya (In Receivership)
7. Citibank
8. Commercial Bank of Africa
9. Consolidated Bank of Kenya
10. Cooperative Bank of Kenya
11. Credit Bank
12. Development Bank of Kenya
13. Diamond Trust Bank
14. Dubai Islamic Bank
15. Ecobank Kenya
16. Equity Bank
17. Family Bank
18. First Community Bank
19. Guaranty Trust Bank Kenya
20. Guardian Bank
21. Gulf African Bank
22. Habib Bank AG Zurich
23. Housing Finance Company of Kenya
24. I&M Bank
25. Imperial Bank Kenya (In receivership)
26. Jamii Bora Bank
27. Kenya Commercial Bank
28. Mayfair Bank
29. Middle East Bank Kenya
30. National Bank of Kenya
31. NIC Bank

32. Oriental Commercial Bank
33. Paramount Universal Bank
34. Prime Bank (Kenya)
35. SBM Bank Kenya Limited
36. Sidian Bank
37. Spire Bank
38. Stanbic Bank Kenya
39. Standard Chartered Kenya
40. Trans National Bank Kenya
41. United Bank for Africa
42. Victoria Commercial Bank

Source: CBK (2020)

Appendix II: Research Data

Bank	Year	ROA	CSR	Capital adequacy	Bank size	Liquidity
ABC Bank	2015	0.0081	0.0022	0.1645	16.9342	0.0544
	2016	0.0029	0.0020	0.1528	16.9451	0.0659
	2017	0.0065	0.0021	0.1560	17.0576	0.0992
	2018	0.0004	0.0012	0.1844	17.1451	0.0633
	2019	0.0023	0.0016	0.1538	17.1964	0.0750
Bank of Africa	2015	(0.0148)	0.0004	0.1639	18.0537	0.0859
	2016	0.0002	0.0006	0.1616	17.8408	0.1142
	2017	0.0012	0.0004	0.1578	17.8080	0.0951
	2018	0.0035	0.0007	0.1602	17.7090	0.2023
	2019	(0.0464)	0.0008	0.1083	17.5996	0.2103
Bank of Baroda	2015	0.0297	0.0030	1.9617	18.0376	0.0475
	2016	0.0355	0.0045	0.3053	18.2332	0.0489
	2017	0.0408	0.0046	0.3229	18.3812	0.0455
	2018	0.0319	0.0029	0.3466	18.6278	0.0519
	2019	0.0286	0.0187	0.3274	18.7805	0.0547
Barclays Bank	2015	0.0349	0.0077	0.1840	19.2998	0.0755
	2016	0.0285	0.0069	0.1786	19.3751	0.0515
	2017	0.0255	0.0051	0.1803	19.4197	0.0602
	2018	0.0228	0.0049	0.1638	19.6003	0.0723
	2019	0.0199	0.0049	0.1667	19.7397	0.0770
Bank of India	2015	0.0263	0.0557	0.4230	17.5571	0.0362
	2016	0.0343	0.0639	0.4574	17.6829	0.0335

Bank	Year	ROA	CSR	Capital adequacy	Bank size	Liquidity
	2017	0.0369	0.0770	0.5397	17.8521	0.0391
	2018	0.0309	0.0683	0.4392	17.9537	0.0340
	2019	0.0374	0.0837	0.4842	17.9514	0.0427
Citibank	2015	0.0386	0.0040	0.2832	18.2945	0.1110
	2016	0.0332	0.0061	0.2637	18.4534	0.0672
	2017	0.0398	0.0035	0.2555	18.4028	0.0835
	2018	0.0369	0.0076	0.2764	18.2656	0.0860
	2019	0.0304	0.0056	0.2715	18.3858	0.1219
Commercial Bank of Africa	2015	0.0167	0.0575	0.1792	19.1891	0.0810
	2016	0.0287	0.0549	0.1845	19.2507	0.1344
	2017	0.0231	0.0521	0.1732	19.3199	0.0947
	2018	0.0226	0.0539	0.1573	19.3172	0.0754
Consolidated bank	2015	0.0031	0.0109	0.0939	16.4642	0.0537
	2016	(0.0152)	0.0109	0.0790	16.4487	0.0469
	2017	(0.0249)	0.0087	0.0509	16.4149	0.0637
	2018	(0.0419)	0.0080	0.0280	16.3718	0.0713
	2019	(0.0448)	0.0074	0.1352	16.2888	0.0764
Credit bank	2015	(0.0058)	0.0132	0.1551	16.1464	0.0247
	2016	0.0090	0.0117	0.2285	16.3200	0.0248
	2017	0.0092	0.0995	0.1477	16.4904	0.0201
	2018	0.0139	0.0093	0.1451	16.7006	0.0228
	2019	0.0098	0.0087	0.1496	16.8910	0.0182

Bank	Year	ROA	CSR	Capital adequacy	Bank size	Liquidity
Co-operative bank of Kenya	2015	0.0342	0.1481	2.1258	19.6518	0.0860
	2016	0.0360	0.1850	0.2277	19.6787	0.0730
	2017	0.0295	0.1274	0.2268	19.7736	0.0627
	2018	0.0308	0.1303	0.1618	19.8406	0.0785
	2019	0.0313	0.1389	0.1505	19.9402	0.0635
Development Bank of Kenya	2016	0.0038	0.0264	0.2508	16.6135	0.0050
	2017	0.0017	0.0199	0.2355	16.6072	0.0040
	2018	0.0075	0.0302	0.2323	16.5449	0.0078
	2019	0.0703	0.0225	0.3147	16.5472	0.0235
Diamond Trust Bank	2015	0.0243	0.1082	0.1463	19.4199	0.0159
	2016	0.0236	0.1284	0.1850	19.6087	0.0180
	2017	0.0191	0.0858	0.1901	19.7107	0.0210
	2018	0.0187	0.0994	0.2111	19.7497	0.0210
	2019	0.0188	0.0640	0.2091	19.7719	0.0212
Dubai Bank	2017	(0.2298)	0.0236	0.7005	14.7750	0.0420
	2018	(0.1192)	0.0040	0.2990	15.4739	0.0990
	2019	(0.0636)	0.0019	0.1486	16.0114	0.1263
Ecobank	2015	0.0017	0.0407	0.2496	17.7749	0.0684
	2016	(0.0429)	0.0497	0.1944	17.6683	0.0477
	2017	(0.0209)	0.0439	0.1599	17.7944	0.0851
	2018	0.0036	0.0451	0.1659	17.8130	0.0743
	2019	0.0021	0.0324	0.1622	18.1380	0.0301

Bank	Year	ROA	CSR	Capital adequacy	Bank size	Liquidity
Equity Bank	2015	0.0405	0.2398	0.2017	19.8748	0.0814
	2016	0.0350	0.1799	0.1966	19.9761	0.0494
	2017	0.0361	0.2209	0.2041	20.0779	0.0509
	2018	0.0346	0.2254	0.1593	20.1671	0.0425
	2019	0.0362	0.2089	0.1979	20.3283	0.0710
Family bank	2015	0.0244	0.0300	0.1441	18.2134	0.0759
	2016	0.0051	0.0210	0.2078	18.0567	0.0790
	2017	(0.0145)	0.0145	0.1986	18.0516	0.0816
	2018	0.0036	0.0195	0.1952	18.0204	0.0937
	2019	0.0120	0.0280	0.1869	18.1831	0.0883
First Community Bank	2015	(0.0008)	0.0038	0.1145	16.4941	0.1685
	2016	(0.0037)	0.0042	0.1399	16.5210	0.1486
	2017	0.0087	0.0039	0.1534	16.6697	0.1340
	2018	(0.0119)	0.0042	0.0911	16.6992	0.1271
	2019	0.0102	0.0044	0.0810	16.7474	0.1678
Guaranty Trust Bank	2015	0.0095	0.0035	0.2649	17.5282	0.0786
	2016	0.0130	0.0048	0.2547	17.2864	0.2266
	2017	0.0067	0.0052	0.2387	17.2774	0.1958
	2018	0.0024	0.0046	0.2597	17.4516	0.0477
	2019	0.0197	0.0063	0.2428	17.1856	0.0526
Guardian Bank	2015	0.0157	0.0168	0.1763	16.4972	0.0904
	2016	0.0156	0.0219	0.1904	16.5037	0.1042

Bank	Year	ROA	CSR	Capital adequacy	Bank size	Liquidity
	2017	0.0101	0.0231	0.2022	16.5757	0.0782
	2018	0.0139	0.0232	0.2275	16.5997	0.0863
	2019	0.0112	0.0241	0.2220	16.6120	0.0961
Gulf African Bank	2015	0.0295	0.0095	0.1577	17.0226	0.0890
	2016	0.0184	0.0127	0.1872	17.1171	0.1278
	2017	0.0049	0.0146	0.1620	17.2596	0.1095
	2018	0.0039	0.0163	0.1866	17.3218	0.0866
	2019	0.0048	0.0181	0.1711	17.3744	0.0642
Habib Bank Ltd	2015	0.0292	0.0379	0.3213	16.1408	0.0526
	2016	0.0245	0.0365	0.3911	16.3419	0.0670
	2018	0.0105	0.0223	0.2463	16.8845	0.0322
	2019	0.0097	0.0211	0.2729	17.0273	0.0305
Housing finance Company ltd	2015	0.0167	0.1162	0.1813	18.0874	0.0004
	2016	0.0126	0.1175	0.1769	18.0912	0.0699
	2017	0.0019	0.1324	0.1700	18.0282	0.0604
	2018	(0.0099)	0.1594	0.1534	17.9190	0.0459
	2019	(0.0020)	0.1790	0.1456	17.8490	0.0504
I&M Bank	2015	0.0373	0.0419	0.2020	19.0716	0.0519
	2016	0.0369	0.0715	0.1815	19.1652	0.0526
	2017	0.0303	0.0981	0.1858	19.2966	0.0495
	2018	0.0264	0.1429	0.1792	19.3315	0.0483
	2019	0.0326	0.0762	0.2156	19.4287	0.0440

Bank	Year	ROA	CSR	Capital adequacy	Bank size	Liquidity
Jamii Bora Bank Ltd	2015	0.0011	0.0080	0.1625	16.6358	0.0647
	2016	(0.0106)	0.0097	0.2008	16.5742	0.0438
	2017	(0.0367)	0.0137	0.1933	16.3714	0.0133
KCB Bank	2015	0.0352	0.1492	0.1536	20.1400	0.1737
	2016	0.0331	0.1587	0.1801	20.2045	0.0494
	2017	0.0305	0.1521	0.1663	20.2873	0.0450
	2018	0.0336	0.1758	0.1955	20.3868	0.0589
	2019	0.0280	0.1468	0.1903	20.6163	0.0676
Middle East Bank (K) Ltd	2016	(0.0127)	0.0069	0.3933	15.4706	0.0575
	2017	(0.0049)	0.0031	0.5708	15.4489	0.1582
	2018	0.0005	0.0055	0.4494	15.4946	0.0660
	2019	0.0004	0.0046	0.3119	15.9516	0.0615
M-Oriental bank ltd	2016	0.0034	0.0101	0.3869	16.1101	0.0801
	2017	0.0091	0.0087	0.3316	16.1741	0.0921
	2018	0.0078	0.0075	0.3093	16.1683	0.1104
	2019	(0.0018)	0.0116	0.3442	16.3327	0.0855
National Bank of Kenya	2015	(0.0092)	0.0079	0.1399	18.6473	0.1310
	2016	0.0006	0.0068	0.0715	18.5348	0.0764
	2017	0.0071	0.0093	0.0542	18.5148	0.0683
	2018	(0.0007)	0.0056	0.0370	18.5591	0.0533
	2019	(0.0080)	0.0485	0.1150	18.5343	0.1132
NIC Plc bank	2015	0.0271	0.0875	0.2059	18.9262	0.0539
	2016	0.0256	0.0594	0.2304	18.9481	0.0429

Bank	Year	ROA	CSR	Capital adequacy	Bank size	Liquidity
	2017	0.0201	0.0672	0.2227	19.1442	0.0462
	2018	0.0203	0.0877	0.1869	19.1550	0.0574
Paramount Bank Ltd	2015	0.0150	0.0346	0.2412	16.1693	0.0958
	2016	0.0113	0.0049	0.2741	16.0592	0.0812
	2017	0.0123	0.0028	0.2946	16.0711	0.1153
	2018	0.0239	0.0056	0.2853	16.1067	0.1249
	2019	0.0088	0.0214	0.2450	16.1615	0.0866
Prime Bank	2015	0.0311	0.0021	0.1729	17.9899	0.0575
	2016	0.0291	0.0018	0.2216	17.9950	0.0413
	2017	0.0288	0.0019	0.2248	18.1721	0.0611
	2018	0.0227	0.0020	0.3729	18.4220	0.0876
	2019	0.0241	0.0022	0.4136	18.5049	0.0531
SBM Bank	2015	(0.0054)	0.0002	0.1509	18.7977	0.0798
	2016	(0.1918)	0.0033	(0.1281)	16.0873	0.0307
	2017	(0.0286)	0.0032	0.1644	16.2608	0.0877
	2018	0.0187	0.0003	0.2425	18.0733	0.1112
	2019	0.0125	0.0004	0.2312	18.0994	0.0586
Sidian Bank	2015	0.0195	0.0541	0.2468	16.7655	0.1559
	2016	0.0013	0.0688	0.2325	16.8541	0.1486
	2017	(0.0219)	0.0800	0.1646	16.7757	0.1991
	2018	(0.0149)	0.0496	0.1440	17.0467	0.0846
	2019	0.0041	0.0638	0.1793	17.0908	0.1250
Stanbic Bank Kenya Ltd	2015	0.0235	0.1386	0.1870	19.1552	0.0544

Bank	Year	ROA	CSR	Capital adequacy	Bank size	Liquidity
	2016	0.0206	0.1169	0.1812	19.1847	0.0402
	2017	0.0173	0.0943	0.1684	19.3319	0.0323
	2018	0.0222	0.1159	0.1740	19.4537	0.0785
	2019	0.0211	0.1287	0.1834	19.4947	0.0914
Standard Chartered Bank	2015	0.0271	0.2291	0.2116	19.2707	0.0609
	2016	0.0361	0.2612	0.2091	19.3389	0.0619
	2017	0.0242	0.2691	0.1852	19.4705	0.0467
	2018	0.0284	0.3083	0.1947	19.4694	0.0711
	2019	0.0273	0.3269	0.1773	19.5264	0.0683
Spire Bank Ltd	2015	(0.0336)	0.0137	0.1745	16.4876	0.0544
	2016	(0.0545)	0.0171	0.1627	16.4404	0.0712
	2017	(0.1010)	0.0094	0.1265	16.2268	0.0305
	2018	(0.2445)	0.0145	(0.2201)	16.0372	0.0445
	2019	(0.0688)	0.0254	(0.2060)	15.7413	0.0205
Transnational Bank	2015	0.0161	0.0176	0.2164	16.1624	0.0974
	2016	0.0105	0.0323	0.2230	16.1547	0.1242
	2017	0.0036	0.0239	0.2908	16.1419	0.1391
	2018	(0.0070)	0.0522	0.2111	16.1414	0.1290
	2019	(0.0090)	0.0348	0.2015	16.0475	0.0869
UBA Kenya Bank Ltd	2015	(0.0338)	0.0697	0.2379	15.8672	0.0312
	2016	0.0043	0.1167	0.3868	15.5385	0.0366
	2017	0.0029	0.0546	0.3878	15.6880	0.0733

Bank	Year	ROA	CSR	Capital adequacy	Bank size	Liquidity
	2018	0.0035	0.0492	0.3316	16.5455	0.0860
	2019	0.0042	0.0215	0.2537	16.5936	0.0256
Victoria Commercial Bank	2015	0.0357	0.0047	0.1930	16.8122	0.0659
	2016	0.0264	0.0049	0.2545	16.9247	0.0598
	2017	0.0238	0.0040	0.2274	17.0730	0.0673
	2018	0.0135	0.0027	0.2109	17.2917	0.0816
	2019	0.0146	0.0031	0.2015	17.4010	0.0780